To all whom it may concern:

Be it known that we, HENRY DITTENHEIMER, a citizen of the United States of America, and SVEN ERIKSON, a subject of the King of Sweden and Norway, both residents of the borough of Manhattan, New York city, State of New York, have invented certain new and useful Improvements in Window-Shade Mountings, of which the following is a specification.

Our invention consists of improved means for mounting a window-shade and for raising or lowering the upper sash of a window to facilitate shifting the sash and so that when the sash is lowered for ventilation or any other purpose it carries with it the window-shade to the extent of the movement of the sash to avoid obstruction of ventilation and so that the part of the window not required to be opened for ventilation still may be shaded sufficiently for practical purposes, as hereinafter described, reference being made to the accompanying drawings, in which—

Figure 1 is a front elevation of a window, showing the application of our improved shade-mounting. Fig. 2 is a vertical section of the window. Fig. 3 is a horizontal section of the same. Fig. 4 is an elevation of the mounting device unattached and enlarged for greater clearness. Figs. 5 and 6 are details in elevation showing a device for retaining the shade-roller pivot in the slotted pivot-bearing.

A represents the window-frame, b the lower sash, and c the stiles, and d the upper cross-piece of the upper sash. At the upper corners and inside of the upper sash we mount brackets for the support of the curtain-roller e, which consist of a vertical plate f for application to the front face of the sash-frame with screw-holes for securing thereto a forwardly-projecting roller-bearing arm g and a foot-piece h at the lower end of the vertical plate. The foot-piece carries an elastic pad i on its under side and is for a cushioned stop to the up movement of the lower sash for lessening the shocks. The arm g has a lateral offset j in the direction of the window-casing k in front of the middle sash-stop l to bring the roller-bearings m as close to the casing as may be, and the brackets are made in pairs, each being in reverse of the other in respect to these offsets and other features adapting them to the respective sides of the window.

From the front end of each bracket there is a pendent extension m', preferably under the roller pivot-bearing, for the connection of a sash-shifting rod n for use in lowering and raising the sash, said shifter to be detachably connected, so as to be conveniently removed, if desired, at times when it is not required to open the sash and for greater convenience in handling the attachments are applied to the window. The means of such connection consists of a lateral perforation o through the extension and an angular reverse bend p of the upper end part of the shifter, which may be connected by presenting the said end to the hole with the shifter upturned to an angle of forty-five degrees, more or less, and thus inserted. Then the shifter, being swung down to the vertical position, cannot be detached by an upward thrust of it, as a plain hook can be, and it serves better for shifting the sash upward.

To prevent accidental upthrust of the roller-pivot q, that is carried in the slotted pivot-bearing m by its momentum when the sash being quickly shifted upward is suddenly arrested by the stops k, we have provided a finger r on a pivot s, set in the bearing-supporting arm g, to swing over pivot q through holes or notches t of the bearing-flanges u and prevent such upthrust. The finger r and its shank are preferably made in springy sheet metal, and a somewhat pointed extension w of the shank is bent, as shown in Fig. 6, to embrace the edge of the bearing-support and prevent disengagement of the finger r from the pivot by the shocks and jars to which it is subject in use, said extension being sufficiently yielding to be forced out of engagement with said edge and along the side of the bearing-support when finger r is pulled back to release the pivot, said finger having a tip v to facilitate the manipulation of the finger. The friction of point w on the side of the pivot-bearing also serves to retain the finger in its disengaged position, so as not to interfere with placing the roller-pivot in its bear-
ing, as gravitating-stops do, making it necessary to hold them out of the way either in placing the roller-pivot in or taking it out of the bearing.

What we claim as our invention is—

1. The combination with an upper window-sash, of shade-roller-supporting brackets having the vertical perforated attaching-plate \( f \) with a sash-stop \( i \) at the lower end, a roller-bearing arm \( g \) having the lateral offset \( j \) and the pendent shifter-connecting extension \( m \).

2. The combination with an upper window-sash, of shade-roller-supporting brackets having the vertical perforated attaching-plate \( f \) with a cushioned sash-stop \( i \) at the lower end, a roller-bearing arm \( g \) having the lateral offset \( j \) and the pendent shifter-connecting extension.

3. The combination with an upper window-sash, of the shade-roller-supporting brackets having the vertical perforated plate \( f \) with a cushioned sash-stop \( i \) at the lower end, a roller-bearing arm \( g \) having the lateral offset \( j \), a pendent shifter-connecting extension, and a pendent shifter-rod having a reversely-bent end and connected by said end with the said extension.

4. The combination with an upper window-sash, of shade-roller-supporting brackets having the vertical perforated attaching-plate \( f \) with a sash-stop \( i \) at the lower end, a roller-bearing arm \( g \), the pendent shifter extension \( m \), and a shifter-rod connected to said extension.

5. The combination with the slotted roller-pivot bearing and the roller-pivot carried therein, of the springy pivot-retaining finger pivoted on the bearing-support and having the bent point engaging the edge of the pivot-bearing support, to retain the finger in engagement with the shade-roller pivot and also in its disengaged position.

Signed at New York this 15th day of December, 1903.

HENRY DITTENHEIMER.
SVEN ERIKSON.

Witnesses:

C. SEDGWICK,
J. M. HOWARD.